

RTP packet. If the conditions on the communications connection become worse, then the number of basic packets to be included in a single RTP packet is reduced. See [0017].

The claimed technology is concerned with optimizing bandwidth use of bandwidth on an RTP link. A packet loss rate for the link is monitored to determine whether it is unacceptably high. The sending rate is then adapted by re-packetizing media (1) to increase the size of packets sent over the link if the rate is too high in order to reduce the packet header overhead, or (2) to decrease the size of the packet sent over the link when the rate of packet loss is within acceptable limits to reduce the transmission delay over the link.

In [0017], Vimpari teaches just the opposite of what is claimed:

The idea of the invention is basically as follows: A hardware arrangement according to the invention makes use of adaptively varying packet lengths on the RTP level. The better the conditions on a communications connection, the greater the number of data blocks that can be attached to a single RTP packet to be transferred. If, on the other hand, the conditions on the communications connection become worse, the number of data blocks, hereinafter called basic packets, to be included in a single RTP packet is reduced... Conversely, in good conditions it is possible to benefit from the decrease of the average proportion of header data per one basic packet in the longer RTP packets and to transfer more user data per unit time on the same physical transfer channel.

The Examiner argues that even though Vimpari decreases packet size when the rate of packet loss is high—directly contrary to what is claimed—the claimed different approach is simply one of “different options of a configuration option” that may be selected. In support, the Examiner contends that Vimpari’s paragraph [0008] discloses a configuration in which packet size is increased by adding more packets to the frame when the rate of frame loss is high.

Paragraph [0008] is part of the background section of Vimpari and addresses the “capacity-consuming effect of the [standard RTP] header” and notes that it could be “reduced by

including in one packet more data blocks containing advantageously consecutive sound samples. One packet could contain e.g. three such data blocks.” But Vimpari then describes that “the frame error rate (FER) could prove problematic with this method,” with frame loss becoming unacceptably high. Vimpari teaches away from the “problematic method” because Vimpari is only concerned with reducing the frame error rate for an individual call, and not with improving conditions on an RTP link for all users of that link (“[a]s a high number of packets must be rejected because of the high FER value, less data will be received per unit time” last sentence of [0008]). See also [0018].

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Teaching away was one indicia of nonobviousness recognized explicitly by the Supreme Court in its *KSR* decision. Clearly, paragraphs [0008], [0017], and [0018] in Vimpari discourage a person of ordinary skill from increasing the size of packets sent over the link when the rate of packet loss is unacceptably high or decreasing the size of packets sent over the link when the rate of packet loss is within acceptable limits according to the claims.

Having warned the skilled person to avoid the undesirable approach in [0008] of increasing packet size when the frame error rate is high, (see also [0018]), Vimpari instructs the skilled person to reduce packet size when the frame error rate is high. This teaching is directly opposite with what is recited in claim 1. Accordingly, Vimpari’s invention outlined in [0017] does not teach or suggest increasing packet size as a result of packet loss being unacceptably high.

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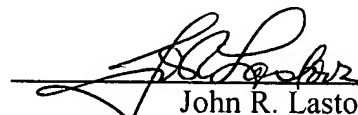
There is a fundamental difference between the claimed approach and that in Vimpari. Vimpari focuses on an individual call connection rather than specific links where each call connection has an uplink and a downlink. Consequently, Vimpari is not concerned with reducing bandwidth useage over the radio interface, but rather with reducing delays for a particular call using that radio interface. Although Vimpari's approach may improve service for a one user, it also detrimentally impacts the service other active users who are communicating with the same MRF node. On the other hand, the claimed technology reduces overall bandwidth useage which increases the radio bandwidth available for other users.

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

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